## SEQUENCE LISTING

<110> TAKARA BIO INC.

<120> Method for introducing mutation into target nucleic acid

<130> 663910

<150> JP 2002-204887

<151> 2002-07-12

<150> JP 2003-113534

<151> 2003-04-18

<160> 16

<170> PatentIn Ver. 2.1

<210> 1

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Gene encoding red-shifted green fluorescence protein.

<400> 1

atggctagca aaggagaaga actcttcact ggagttgtcc caattcttgt tgaattagat 60

ggtgatgtta acggccacaa gttctctgtc agtggagagg gtgaaggtga tgcaacatac 120 ggaaaactta ccctgaagtt catctgcact actggcaaac tgcctgttcc atggccaaca 180 ctagtcacta ctctgtgcta tggtgttcaa tgcttttcaa gatacccgga tcatatgaaa 240 cggcatgact ttttcaagag tgccatgccc gaaggttatg tacaggaaag gaccatcttc 300 ttcaaagatg acggcaacta caagacacgt gctgaagtca agtttgaagg tgataccctt 360 gttaatagaa tcgagttaaa aggtattgac ttcaaggaag atggaaacat tctgggacac 420 aaattggaat acaactataa ctcacacaat gtatacatca tggcagacaa acaaaagaat 480 ggaatcaaag tgaacttcaa gacccgccac aacattgaag atggaagcgt tcaactagca 540 gaccattatc aacaaaatac tccaattggc gatggccctg tccttttacc agacaaccat 600 tacctgtcca cacaatctgc cctttcgaaa gatcccaacg aaaagagaga ccacatggtc 660 cttcttgagt ttgtaacagc tgctgggatt acacatggca tggatgaact gtacaactga 720

<210> 2

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-EcoRI to amplify a gene encoding red-shifted green fluorescence protein.

<400> 2

cttgaattcg gtaccgagct cggatcgggc gcgcaagaaa

40

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer DEND to amplify
a gene encoding red-shifted green fluorescence protein.

<400> 3

cactggcggc cgttactagt

20

<210> 4

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-HindIII
 to amplify a gene encoding red-shifted green fluorescence
 protein.

<400> 4

cttaagcttg gtaccgagct cggatcgggc gcgcaagaaa

40

<210> 5

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer U100HindIII to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 5

ctaagcttct ggcaaactgc ctgttccatg gccaacacta

40

<210> 6

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer D100BamHI to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 6

tcggatccaa gtcatgccgt ttcatatgat ccgggtatct

40

<210> 7

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-EcoRI-1
to amplify a gene encoding red-shifted green fluorescence
protein.

<400> 7

gaattcggta ccgagctcgg atcgggcgcg caagaaa

37

<210> 8

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-HindIII-1
 to amplify a gene encoding red-shifted green fluorescence
 protein.

<400> 8

aagcttggta ccgagctcgg atcgggcgcg caagaaa

37

<210> 9

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer U100HindIII-1
 to amplify a portion of gene encoding red-shifted green
 fluorescence protein.

<400> 9

aagcttctgg caaactgcct gttccatggc caacacta

38

<210> 10

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(4)

<223> um

<220> <221> modified\_base

<222> (50).. (53)

<223> um

<220>

<223> Description of Artificial Sequence: Chimeric oligonucleotide
 ss Oligo.

<400> 10

uuuuatettg aaaageattg aacaccatag cacagagtag tgactagtgu uuut

- <210> 11
- <211> 35
- <212> DNA
- <213> Artificial Sequence
- <223> Description of Artificial Sequence: PCR primer RNA-ecoRI to amplify a portion of gene encoding red-shifted green fluorescence protein. "nucleotides 1 to 6 are 2'-0-methyl ribonucleotides other nucleotides are deoxyribonucleotides"

<400> 11

gaauucggta ccgagctcgg atcgggcgcg caaga

35

- <210> 12
- <211> 35
- <212> DNA
- <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer RNA-hindIII to amplify a portion of gene encoding red-shifted green fluorescence protein. "nucleotides 1 to 6 are 2'-0-methyl ribonucleotides - other nucleotides are deoxyribonucleotides"

<400> 12

<210> 13

<211> 30

<212> DNA

<213> homo sapience

<400> 13

gattgcttta gcttggaaat tccggagctg

30

<210> 14

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer GFP-kB1 to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 14

40

<210> 15

<211> 40

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: PCR primer GFP-kB2 to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 15

tccggaattt ccaagctaaa gcaatctcag ttgtacagtt

<210> 16

<211> 40

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: PCR primer GFP-kB3 to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 16

ttttggatcc cagctccgga atttccaagc taaagcaatc

40

40